

## ABSTRACT OF THE DISCLOSURE

A test wafer for use in wafer temperature prediction is prepared. The test wafer includes: first semiconductor layer formed in a crystalline state; second semiconductor layer formed in an amorphous state on the first semiconductor layer; and light absorption film formed over the second semiconductor layer. Next, the test wafer is loaded into a lamp heating system and then irradiating the test wafer with a light emitted from the lamp, thereby heating the second semiconductor layer through the light absorption film. Thereafter, a recovery rate, at which a part of the second semiconductor layer recovers from the amorphous state to the crystalline state at the interface with the first semiconductor layer, is calculated. Then, a temperature of the test wafer that has been irradiated with the light is measured according to a relationship between the recovery rate and a temperature corresponding to the recovery rate.